DATA ITEM DESCRIPTION

Title: COMPREHENSIVE ENGINE MANAGEMENT SYSTEM (CEMS) REPORTING

Number: DI-MGMT-81324C

AMSC Number: F9543

DTIC Applicable: No

Approval Date: 20150505

Limitation: N/A

GIDEP Applicable: No

Preparing activity: 71 Project Number: MGMT-2015-018

Applicable Forms: CEMS Event Reporting Document, DD Form 2875 (GCSS), DD Form 2875 (CEMS), and Non-Disclosure Statement.

Use/relationship: CEMS reporting is required by all organizations possessing and/or maintaining Air Force (AF) engines or components on behalf of the AF to maintain a complete and accurate worldwide inventory of AF engines, installed assemblies and components. The CEMS reporting data consists of aircraft engine and maintenance status information as directed by the AF propulsion community.

- a) This Data Item Description (DID) contains the instructions for reporting engine, assembly and/or component status data to the AF Accountable Property System of Record (APSR), CEMS. It also contains the format and content preparation instructions for the data reporting generated by the specific and discrete task requirement as delineated in the contract.
- b) This DID is applicable when contractors are required to report engine and/or component status data to CEMS.
- c) Publications referenced below are available on the CEMS web site, https://www.my.af mil/gimmsprod/cpmo/.
- d) This DID supersedes DI-MGMT-81324B.

Requirements:

- 1. Reference documents: The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract. Definitions and/or descriptions of the various data codes authorized for entry in the specified blocks of the CEMS Event Reporting Document are contained in United States Air Force Technical Order (TO) 00-25-254-1.
- 2. Format. Unless an agreed upon approved interface exists, all required input is via the reporting process known as CEMS.
- 3. Content.
- 3.1 Access to CEMS: In order to accomplish access to government computer systems for the purpose of reporting the following is required:
 - a. The minimum of a favorable National Agency Check with Inquiries (NACI) is required for any contractor accessing Department of Defense (DoD) information systems. Procedures concerning Industrial Security Clearances and Investigations can be found at http://www.dss.mil/isp/index.html.
 - b. An DD FM 2875 must be completed and sent by fax or signed email to the AF Portal Program Office: gcssaf.opsandsupport@gunter.afmil, or faxed to the AF Portal Program Office (DSN 596-5771, or faxed to the AF Portal Program Office DSN 596-5771, Commercial 334-416-5771; Option 7) to obtain an AF Portal Account. DD FM 2875, as well as additional information may be obtained at https://www.my.afmil, by accessing "View Account Requirements & Benefits."
 - c. After AF Portal access is obtained, a DD Form 2875, a copy of the DoD Information Assurance Awareness Training Certificate (Course: ZZ133098) and a Nondisclosure Statement must be completed requesting access to CEMS and e-mailed to CEMS.PMO.Security@us.af.mil. The form and Nondisclosure Statement may be downloaded from https://www.my.af.mil/gimmsprod/cpmo/, by clicking on the "Forms" folder and clicking "System Access." Instructions are included with the form. The DoD Cyber Awareness Challenge (Course: ZZ133098) may be completed:

https://golearn.csd.disa.mil/kc/login/login.asp?kc_ident=kc0001&blnAccess=TRUE for Dot-Mil Users and http://iase.disa.mil/eta/cyberchallenge/launchPage.htm for Dot-Com users.

- d. You can only access CEMS via the AF Portal. The CEMS PMO, (405)734-7874, DSN: 884-7874, or Toll Free: 1-800-956-7351, should be contacted for further information.
- 3.2 Inputs to CEMS: Description of Entries on the CEMS Event Reporting document.
- Block 1 CII Designation. Direct reporting and mail-in enter CII as shown in the CII table.
- **Block 2** S/N (10 Max Alpha Numeric characters). Enter the S/N as express below for position 1 thru 4 and using the last 6 characters listed on the data plate. CEMS does not recognize a dash (-). If dashes (-) are encountered on the engine, assembly or part data plate, the dash will be replaced with a zero for reporting purposes. If data plate contains any other special character, contact the CEMS PMO for instructions.

Example: 629-1234 will be input to CEMS as "0062901234." The standard method of structuring serial numbers in CEMS is as follows:

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\begin{split} MM &= \text{Manufacturer's Code (two position)} \\ Z &= Zero \ (0) \end{split}
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C = Engine module symbol as follows:

Basic Engine E Augmentor A

Fan F

Compressor C

Turbine (LPT) L

Turbine (HPT) H

Gearbox G

Turbine T

X= An alpha or numeric character

NOTE

- With the exception of the F107 engine, all century series engines (i.e. F100, F101,etc.) and T56 engines use structure MMZCXXXXXX, where column 5 through 10 are the values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.
- Examples: F100-100 Engine "PW0E680092." "T56 engine S/Ns prior to 113432 will reflect the old S/N structure in CEMS of MMZZXXXXXX. T56 gearbox S/Ns prior to S/N 33641 will reflect the old S/N structure in CEMS of ZZMCXXXXXX. T56 engine 113432 and beyond will use MMZCXXXXXX."
- Example: (AD0E113432), Gearbox 33641 and beyond will use MMZCXXXXXX.
- Example: (AD0G033641), All other aircraft engines use structure MMZZXXXXXX, where column 5 through 10 are values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.
- Example: J75-17 Engine "PW00611438." All tracked assemblies and parts and all non-F100 modules use structure 10 positions. All 10 positions are values obtained from the data plate. The field will be moved to the right and zero filled on the left. The alpha O will be converted to numeric 0 and the alpha I will be converted to numeric 1 for reporting purposes.
- **Block 3** Occurrence Date and/or Hour. Enter the actual Julian date and time the status change occurred.
- **Block 4** SRAN. Enter SRAN of the activity preparing report.
- **Block 5** Command. Enter the applicable major and subcommand codes.

- **Block 6** Organization Code. Alpha characters for local use and is one position alpha, excluding "X" or a numeric "1" to indicate engine(s) in a deployed status.
- **Block 7** Engine Ownership Account. Enter the one position engine ownership account code. Account codes A, B, C, E, G, K, L, N, P, R, S, and Z are Air Force engines. Transfers between these accounts will be made on routine reports (code R, block 8). Account codes D, F, H, J, T, and W are other than Air Force engines. Transfer between Air Force and other than Air Force accounts will be made on K type report (block 8). All uninstalled engine transfers on K type reports must be documented and a copy of the document maintained as prescribed in referenced TO. If account code J is reported, see instructions (block 19). Engines transferred to classified project (L account, routine report) will not be reported thereafter until returned or until the classified project is canceled. Returns from a classified project will be reported as a receipt to the A-account on a routine report. Engines assigned to ground training (S account) require no subsequent reporting except when engines are installed, removed, or transferred, or when assignment to S account terminates. Engines installed and removed for training are to be considered as installed at all times. Engines received from other than Air Force activities for repair and return are to be retained in the activity's account while on hand. If an exchange of engines with the Air Force is to be accomplished, the transfers between accounts will be made on K type reports.
- **Block 8** Engine Type Report. Enter the appropriate report code IAW the referenced TO.
- **Block 9** Part Number. Enter the part number from the data plate.
- **Block 10** Transaction Code. Circle the appropriate transaction code.
- **Block 11** Condition Code. Circle the appropriate engine condition code.
- **Block 12** Miscellaneous System Update. Circle the appropriate system update code.
- **Block 13** To-From Command and/or SRAN. Enter the shipped to-from SRAN. Report the owning command code for tenant shipments and receipts. Block will be blank for reports of transfer to or from classified projects.
- **Block 14** Type of Shipping Device. Optional.
- **Block 15** Engine Related How Mal Codes. Enter the engine related How Mal Code that best identifies the symptom that is causing the removal.
- **Block 16** Reason for Return to Overhaul. Enter appropriate reason for return to overhaul code.
- **Block 17** Reparable Engine S/N. Optional or enter the S/N of the reparable engine being replaced by the serviceable shipment. This number or the word stock will be furnished by the EIM. If a number or the word stock is not furnished by the EIM, enter "Not Furn."
- Block 18 PRIMARY/SECONDARY HOW MAL INDICATOR, P (Primary) S (Secondary) (CIRCLE ONE)
- **Block 19** SAP number. On K reports for engines gained to or from a SAP country, enter the six position SAP ID number contained in the supplementary address field, card columns 45 through 50, of the DD Form 1348-1A. If the SAP number is not listed in the supplementary address field, contact the prime EIM.
- **Block 20** Document Number-NSN. Enter the debit or credit number from the document covering gain and loss transactions. For all shipments and receipts of uninstalled engines to-from a different SRAN reporting activity, enter the TCN from card columns 30 through 43 of the DD Form 1348-1A or block six of DD Form 1149, REQUISITION AND INVOICE/SHIPPING DOCUMENT. If not received with the engine, contact the previous SRAN EM for the TCN the engine was shipped with.

Also, if the shipment has been reported to CEMS, the TCN will appear on part 2 of the EMDL. For uninstalled reimbursable account transfer (K type report), to a non-Air Force account (SAP, Navy, Army, FAA, etc.), report the requesting activities requisition number obtained from the prime EIM.

Document numbers are constructed following the guidance in DOD 4000 25-1-M, Military Standard Requisitioning and Issue Procedures (MILSTRIP), or per instructions in AFM 23-110 and/or applicable Supply Local Operating Instructions.

Position 1-6 DOD Activity Address - Code of Activity assigning the num-

ber e.g. FJ2039 (FJ suffix is used for Air Force reporting and EJ

suffix is used for Contractor)

Position 7 Last digit of the calendar year
Position 8-10 Julian day of document assignment

Position 11-12 S/N assigned by activity

Position 13-14 Two digit alpha engine ID code

NSN is constructed as follows:

Position 1-4 Federal Stock Class, e.g., 2840 Position 5-6 Country Code, e.g., 01 (USA)

Position 7-13 National Item Identifier Number (NIIN) e.g., 5869746
Position 14-15 Material Management Code (MMC), e.g., RU, if applicable

Block 21 - Engine Flying Time. For non-parts tracked (status) engines, enter TSO. Time is recorded in days, hours, or minutes as required by engine TMSM. The number is right justified with a single decimal place. The fraction of hours is rounded (up or down) to the nearest tenth of an hour. Time will be reported in whole minutes for the J69-406 engines. Time will be recorded in whole calendar days on the F107 and F112 engines.

Block 22 - Cycle Sortie Count. Enter cycle sortie count.

Block 23 - TMSM. Enter the TMSM for the engine that is being reported. TMSM is defined as a 12 position field for TMS and Modification of a given engine family.

Position 1-3 Type (alphanumeric, right justified, prefix with spaces)
Position 4-7 Model (alphanumeric, right justified, prefix with zeros)
Position 8-10 Series (alphanumeric, right justified, prefix with zeros)
Position 11-12 Modification (alphanumeric, left justified, suffix with spaces)

Reference TMSM table.

Block 24 - NHA Designation. When entry is required and the NHA is an aircraft, enter the seven position alphanumeric MDS; or enter the NHA seven position alphanumeric CII code. When entry is required and the report initialized (TCC 6N) an uninstalled tracked item, fill all seven positions with nines.

Standard MDS structure is as follows:

Position 1-3 Mission (alphanumeric, right justified, prefix with spaces)
Position 4-6 Design (alphanumeric, right justified, prefix with zeros)

Position 7 Series (alphanumeric)

Block 25 - NHA S/N Structure. For aircraft S/N, use YYNNNNNNN where YY is year of manufacture and NNNNNNNN is the tail number prefixed with zeros. When an initialization entry (TCC 6N) is required on an uninstalled tracked item, fill all 10 positions with nines.

Block 26 - Position Number. If the engine being reported is applicable to a single QPA, enter the digit one. For multiple engine aircraft, engines will be numbered from left to right from pilot's position. Missiles and tracked assemblies/parts are exempt from this entry.

Block 27 - Is used when additional information is required on CEMS Event Report, i.e., Reason for Delay Codes.

CII DESIGNATION Type Report TRANSACTION		9. PART NUMBER				3. OCCURRENCE	4. SRAN	5. CMD	6. ORG	7. ACCT
						3a. DATE 3b. HOUR	1			
						13. TO/FRO	М	14. SHIPPING DEVICE		
		11. CONDITION 12. MISC SYSTEM UPDATES		\dashv	13a. CMD 13b. SRAN					
GAIN	_	SERVICEABLE		COMMAND CODE CHANGE	20	15. ENG RELATED	16. REAS	ON EOP	17 DED	ARABLE ENG
NEW PRODUCTION	Λ	BUILT-UP	В	ACCOUNT CODE CHANGE		HOW MAL CODE	-		SERIAL NUMBER	
REIMBURSABLE		RAW		ORG CODE CHANGE	2M	HOW MAL CODE	KETOKI	IO OVIIL	JENIAL	NOMBER
NON-REIMBURSABLE	c	10111	- ``	MDS/POSITION CHANGE	2P	1				
EXCHANGE	D			REVERSE SHIP/TRANS		18. PRIMARY/SECONDARY HOW MAL 19. SAP NUMBER				
L/OI II (I TOL	۲	REPARABLE	_	ADD TIME	6A					
LOSS		CONDEMNED	^	REACTIVATE CONDEMN (PARTS)		•	, .	·	I	
ATTRITION	۱۸/	WITH QEC	F			20. DOCUMENT NUMB	FR/NSN		-	
FOR PARTS	×	WITHOUT QEC		UPDATE TO UNKN (PARTS)	6D	20. DOCOMILIYI NOMB	LIVINOIN			
SALVAGE/DPDO	v	MINOR OVHL		ENGINE ID CHANGE	6E					
OTHER	7	MAJOR OVHL	L		_	21. ENGINE FLYING TIME 22. CYCLE/SORTIE				
	_	QUICK TURN		MASS LOSS (PARTS)	6G					
INSTALLED		QUICIT TOTAL	Ť	SINGLE ENGINE UPDATE	6H	-1				
RECEIVED	R	INSTALLED		MASS INITIALIZATION (PARTS)	_	23. TMSM		24. NHA	DESIGNA	TOR
TRANSFERRED	_	ACTIVE	Α	INITIALIZE/SRAN CHG (PARTS)	6N				220.0.0	
TRANSIENT	U	INACTIVE		MAINTENANCE UPDATE	6P					
OTHER	V			SUBTRACT TIME	6S	25. NHA SERIAL NUM	BER	26. POSI	TION	
				INITIALIZE WINDOW VALUES	6T					
UNINSTALLED				UPDATE	6U					
ENMCS	Е			EGT UPDATE (F108 ONLY)	6W	27. REMARKS				
WORK COMPLETED	F			MANUAL TIME CHANGE	6X	1				
TEST CELL REJECT	G					1				
WORK STOPPED	Н			1						
WORK STARTED	J			1						
REMOVED TRANSIENT	Κ			1						
REMOVED OTHER	L			1		1				
CHANGE IN MAINT	М									
AWAIT DISPOSITION	Ν					1				
SSUE MAINTENANCE	Ρ					1				
RECEIVED	R]		1				
SHIPPED	S		Ŧ	4						
STORAGE		STORAGE								
STORAGE INSTALLED	8	THREE POINT CONNECTIO	N Z	1						

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